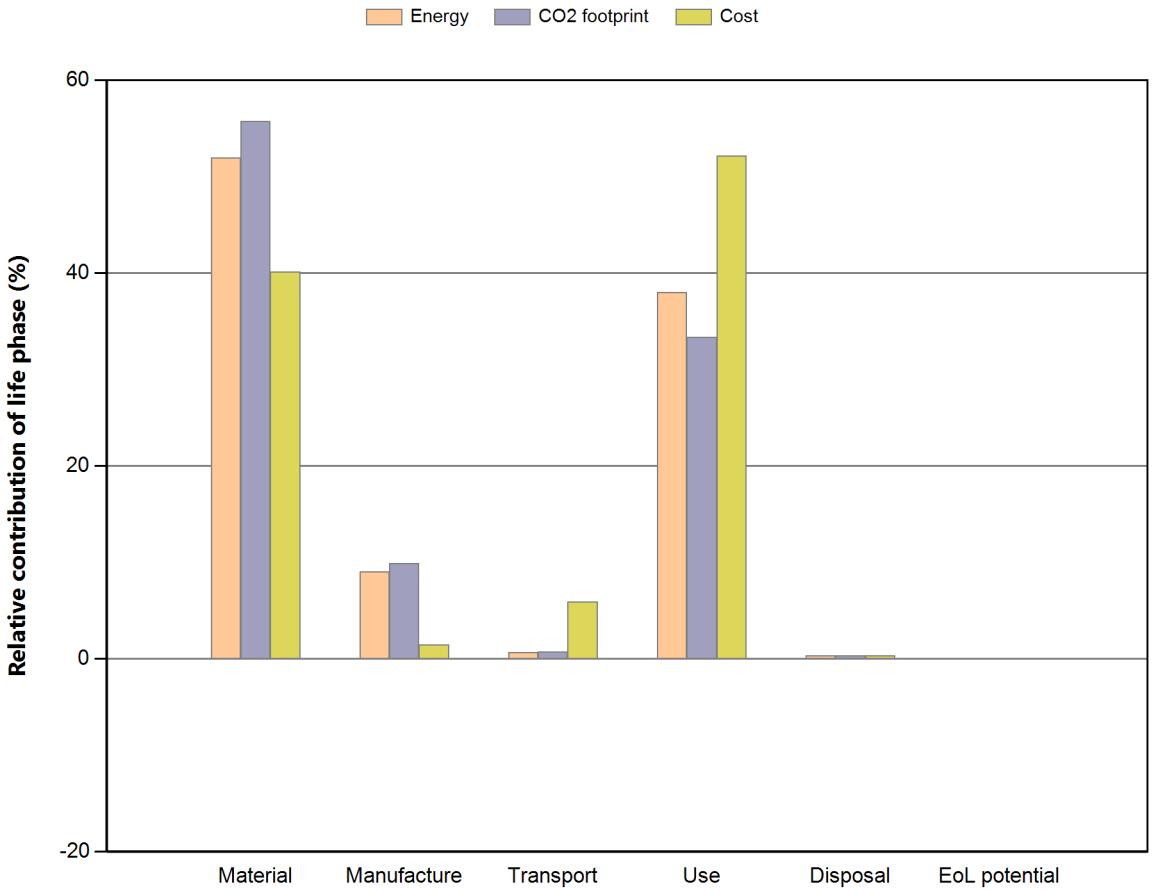
Eco Audit Report

Product name	Beschermkap X120Mn12
Country of manufacture	World
Country of use	World
Product life (years)	10

Summary:

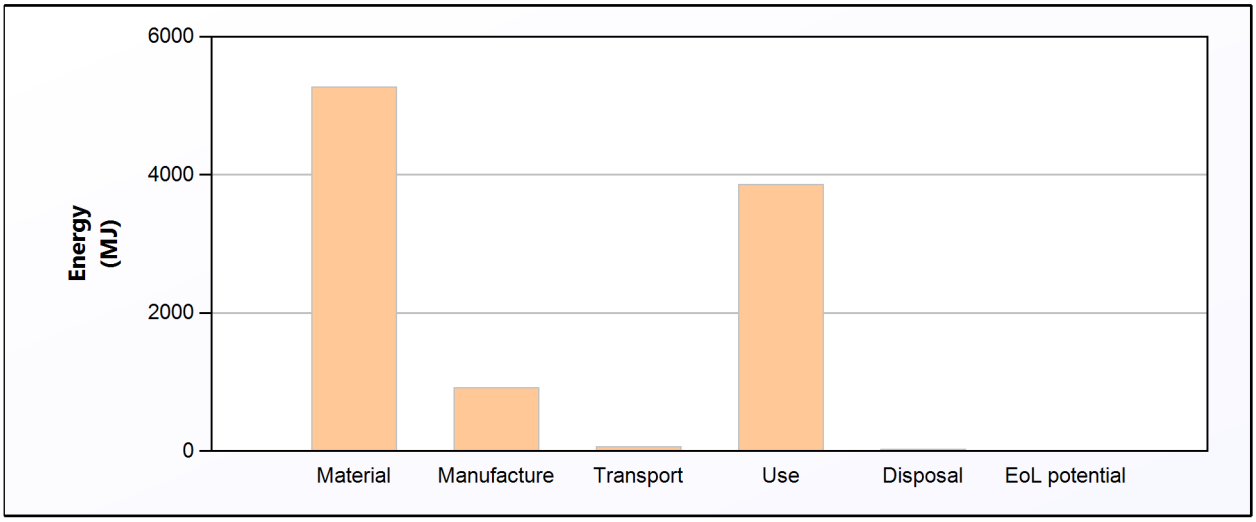


Energy details CO2 footprint details Cost details

Phase	Energy (MJ)	Energy (%)	CO2 footprint (kg)	CO2 footprint (%)	Cost (EUR)	Cost (%)
Material	5.28e+03	51.9	388	55.7	113	40.1
Manufacture	917	9.0	68.7	9.9	4.16	1.48
Transport	69.6	0.7	5.01	0.7	16.7	5.92
Use	3.86e+03	38.0	232	33.4	147	52.2
Disposal	32.2	0.3	2.25	0.3	0.885	0.314
Total (for first life)	**1.02e+04**	**100**	**696**	**100**	**282**	**100**
End of life potential	0		0			

Energy Analysis

Summary



	Energy (MJ/year)
Equivalent annual environmental burden (averaged over 10 year product life):	1.02e+03

Detailed breakdown of individual life phases

Material:

Summary

Component	Material	Recycled content* (%)	Part mass (kg)	Qty.	Total mass processed** (kg)	Energy (MJ)	%
Sheet metal	Carbon steel, AISI 1340, normalized	Virgin (0%)	0.7	230	1.7e+02	5.3e+03	100.0
Total				**230**	**1.7e+02**	**5.3e+03**	**100**

*Typical: Includes 'recycle fraction in current supply'

**Where applicable, includes material mass removed by secondary processes

Manufacture:

Summary

Component	Process	% Removed	Amount processed	Energy (MJ)	%
Sheet metal	Roll forming	-	1.7e+02 kg	8.5e+02	92.4
Sheet metal	Fine machining	5	8.5 kg	64	7.0
Galvanize	Electroplating	-	0.06 m^2	5.3	0.6
Total				**9.2e+02**	**100**

Transport:

Summary

Breakdown by transport stage

Stage name	Transport type	Distance (km)	Energy (MJ)	%
Transport to customer	14 tonne (2 axle) truck	15	3.6	5.2
Costumer to end-user	40 tonne (6 axle) truck	5e+02	66	94.8
Total		**5.2e+02**	**70**	**100**

Breakdown by components

Component	Mass (kg)	Energy (MJ)	%
Sheet metal	1.6e+02	70	100.0
Total	**1.6e+02**	**70**	**100**

Use:

Summary

Static mode

Energy input and output type	Electric to mechanical (electric motors)
Country of use	World
Power rating (W)	5
Usage (hours per day)	24
Usage (days per year)	3.7e+02
Product life (years)	10

Relative contribution of static and mobile modes

Mode	Energy (MJ)	%
Static	3.9e+03	100.0
Mobile	0	
Total	**3.9e+03**	**100**

Disposal:

Summary

Component	End of life option	% recovered	Energy (MJ)	%
Sheet metal	Landfill	100.0	32	100.0
Total			**32**	**100**

EoL potential:

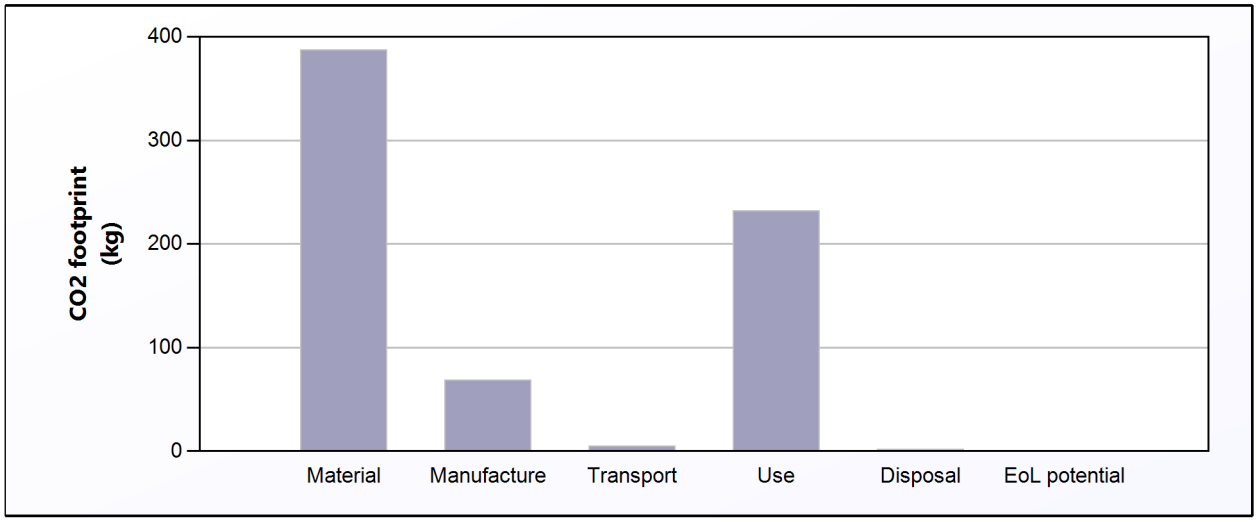
Component	End of life option	% recovered	Energy (MJ)	%
Sheet metal	Landfill	100.0	0	
Total			**0**	**100**

Notes:

Summary

CO2 Footprint Analysis

Summary



	CO2 (kg/year)
Equivalent annual environmental burden (averaged over 10 year product life):	69.6

Detailed breakdown of individual life phases

Material:

Summary

Component	Material	Recycled content* (%)	Part mass (kg)	Qty.	Total mass processed** (kg)	CO2 footprint (kg)	%
Sheet metal	Carbon steel, AISI 1340, normalized	Virgin (0%)	0.7	230	1.7e+02	3.9e+02	100.0
Total				**230**	**1.7e+02**	**3.9e+02**	**100**

*Typical: Includes 'recycle fraction in current supply'

**Where applicable, includes material mass removed by secondary processes

Manufacture:

Summary

Component	Process	% Removed	Amount processed	CO2 footprint (kg)	%
Sheet metal	Roll forming	-	1.7e+02 kg	64	92.6
Sheet metal	Fine machining	5	8.5 kg	4.8	7.0
Galvanize	Electroplating	-	0.06 m^2	0.29	0.4
Total				**69**	**100**

Transport:

Summary

Breakdown by transport stage

Stage name	Transport type	Distance (km)	CO2 footprint (kg)	%
Transport to customer	14 tonne (2 axle) truck	15	0.26	5.2
Costumer to end-user	40 tonne (6 axle) truck	5e+02	4.8	94.8
Total		**5.2e+02**	**5**	**100**

Breakdown by components

Component	Mass (kg)	CO2 footprint (kg)	%
Sheet metal	1.6e+02	5	100.0
Total	**1.6e+02**	**5**	**100**

Use:

Summary

Static mode

Energy input and output type	Electric to mechanical (electric motors)
Country of use	World
Power rating (W)	5
Usage (hours per day)	24
Usage (days per year)	3.7e+02
Product life (years)	10

Relative contribution of static and mobile modes

Mode	CO2 footprint (kg)	%
Static	2.3e+02	100.0
Mobile	0	
Total	**2.3e+02**	**100**

Disposal:

Summary

Component	End of life option	% recovered	CO2 footprint (kg)	%
Sheet metal	Landfill	100.0	2.3	100.0
Total			**2.3**	**100**

EoL potential:

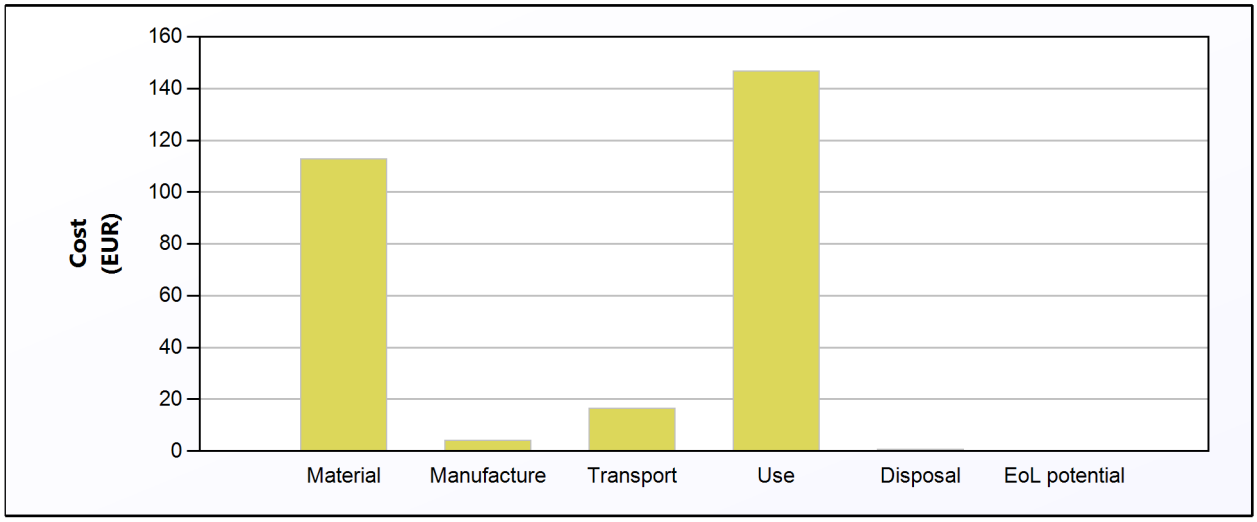
Component	End of life option	% recovered	CO2 footprint (kg)	%
Sheet metal	Landfill	100.0	0	
Total			**0**	**100**

Notes:

Summary

Cost Analysis

Summary



	Cost (EUR/year)
Equivalent annual environmental burden (averaged over 10 year product life):	28.2

Detailed breakdown of individual life phases

Material:

Summary

Component	Material	Recycled content* (%)	Part mass (kg)	Qty.	Total mass processed** (kg)	Cost (EUR)	%
Sheet metal	Carbon steel, AISI 1340, normalized	Virgin (0%)	0.7	230	1.7e+02	1.1e+02	100.0
Total				**230**	**1.7e+02**	**1.1e+02**	**100**

*Typical: Includes 'recycle fraction in current supply'

**Where applicable, includes material mass removed by secondary processes

Manufacture:

Summary

Country of manufacture World

Component	Process	Length (m)	% Removed	Amount processed		Cost (EUR)	%
Sheet metal	Roll forming	2	-	1.7e+02	kg	0.86	20.8
Sheet metal	Fine machining	-	5	8.5	kg	3.2	78.0
Galvanize	Electroplating	-	-	0.06	m^2	0.05	1.2
Total						**4.2**	**100**

Transport:

Summary

Package dimensions

Height (m)	Width (m)	Depth (m)
2	1	0.025

Breakdown by transport stage

Stage name	Transport type	Distance (km)	Cost (EUR)	%
Transport to customer	14 tonne (2 axle) truck	15	5	30.2
Costumer to end-user	40 tonne (6 axle) truck	5e+02	12	69.8
Total		**5.2e+02**	**17**	**100**

Breakdown by components

Component	Mass (kg)	Cost (EUR)	%
Sheet metal	1.6e+02	17	100.0
Total	**1.6e+02**	**17**	**100**

Use:

Summary

Static mode

Energy input and output type	Electric to mechanical (electric motors)
Country of use	World
Fuel rate	Domestic
Power rating (W)	5
Usage (hours per day)	24
Usage (days per year)	3.7e+02
Product life (years)	10

Relative contribution of static and mobile modes

Mode	Cost (EUR)	%
Static	1.5e+02	100.0
Mobile	0	
Total	**1.5e+02**	**100**

Disposal:

Summary

Component	End of life option	% recovered	Cost (EUR)	%
Sheet metal	Landfill	100.0	0.89	100.0
Total			**0.89**	**100**

Notes:

Summary